GOVERNMENT OF INDIA
POWER
LOK SABHA

UNSTARRED QUESTION NO:3873
ANSWERED ON:08.12.2016
Energy Consumption
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Will the Minister of POWER be pleased to state:

(a) the details of the growth rate of energy consumption in the country during the last three years and the current year;

(b) whether the growth in energy consumption is considered to be indicative of economic revival, if so, the details thereof along with its adverse effect of environment; and

(c) the steps being taken by the Union Government to maintain ecological balance?

Answer

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : The details of the growth rate of energy consumption (Utilities & Non-Utilities) in the country during the last three years and the current year is given at Annex.

(b) & (c) : Generally, growth in energy consumption is positively correlated with economic growth.

Growth in energy generation from inefficient coal based thermal power stations has some adverse effect on environment. However, in order to reduce adverse effect on environment and to maintain ecological balance, the Government of India is taking following measures:

(i) Government has set a target to achieve a large capacity of 175 GW from renewable energy sources by the year 2022, thereby increasing the share of clean, pollution free energy in the energy-mix of our country. As a result, the fossil based capacity addition will be less in the coming years.

(ii) Installation of coal fired generation units based on supercritical technology. These units are more efficient than sub-critical units resulting in less fuel consumption & air emissions. A capacity addition of 36,930 MW based on supercritical technology has been achieved and 48,200 MW of supercritical thermal units are under construction. Further, it is proposed that coal based capacity addition during the 13th Plan period shall be mainly through super-critical units.

(iii) Phased retirement of in-efficient and old thermal power generation units has been taken up. A capacity of about 6010 MW has already been retired as on 31.10.2016.

(iv) To facilitate State Utilities/IPPs to replace old inefficient coal based thermal units with supercritical units, Ministry of Coal, Government of India has formulated a policy of automatic transfer of LOA/Coal linkage (granted to old plants) to new (proposed) super-critical units.

(v) Coal cess has been increased from Rs.200/ton to Rs.400/ton to enhance National Clean Energy Fund (NCEF) to be utilized for promoting clean electricity production.

(vi) Perform, Achieve & Trade (PAT) Scheme was introduced in the year 2012 to reduce specific energy consumption of Thermal Units. This scheme has resulted in improving the unit heat rate and thereby reduction in emissions.

(vii) Thermal Power Plants have been asked to undertake afforestation, development of green-belt area, use of Effluent Treatment Plant (ETP) for treating effluents produced by various processes to maintain the quality for recycle/use in horticulture inside the plant and the water intake/discharge temperature difference from cooling tower to sea/ river/lake is maintained less than 70 C to avoid adverse effect on fish and other aquatic organisms.

(viii) The new Thermal Power Plants have been mandated to maintain Zero Liquid Discharge (ZLD) to ensure less adverse effect on ecology.

(ix) Sewage Treatment Plant (STP) is installed in Thermal plants to treat sewage/ waste water of residential area/township. The treated water, thus produced, is used for horticulture inside the plant boundary.

(x) Ministry of Environment, Forest & Climate Change (MOEF&CC) has notified new stringent environmental norms on 07 December

2016 for thermal power plants for Suspended Particulate Matter (SPM), SO2, NOx and mercury emissions and water consumption. The implementation of pollution control equipment for meeting these norms will further reduce the adverse impact on environment due to thermal plants.
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